No. 8900111

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Ferry-Morse Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOMATO

'Yuba'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington, D.C. *this* 28th *day of* February *in the year of our Lord one thousand nine hundred and* ninety-two.

Attest:

Kenneth R. Evans

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Edward Madigan

Secretary of Agriculture

APPROVAL EXPIRES 2-28-88

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

FORM APPROVED: OMB NO. 0581-0055

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)
FERRY-MORSE SEED COMPANY

2. TEMPORARY DESIGNATION
FM 48432

3. VARIETY NAME
YUBA

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
555 CODONI
P.O. BOX 4938
MODESTO, CALIFORNIA 95352

5. PHONE *(Include area code)*
209/579-7333

FOR OFFICIAL USE ONLY

PVPO NUMBER
8900111

6. GENUS AND SPECIES NAME
Lycopersicon esculentum Mill

7. FAMILY NAME *(Botanical)*
Solanaceae

FILING
DATE Mar. 13, 1989
TIME 11:00 [X] A.M. [ ] P.M.

8. KIND NAME
TOMATO

9. DATE OF DETERMINATION
January 1987

FEES RECEIVED
AMOUNT FOR FILING
$ 1800.00
DATE Mar. 10, 1989
AMOUNT FOR CERTIFICATE
$ 200.00
DATE Feb. 7, 1992

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*
CORPORATION

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
CALIFORNIA

12. DATE OF INCORPORATION
7 APRIL 1969

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
DAVID J. THOMPSON
FERRY-MORSE SEED COMPANY
P.O. BOX 4938
MODESTO, CALIFORNIA 95352
PHONE *(Include area code)*: 209/579-7333

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED
a. [X] Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
b. [X] Exhibit B, Novelty Statement.
c. [X] Exhibit C, Objective Description of Variety *(Request form from Plant Variety Protection Office.)*
d. [X] Exhibit D, Additional Description of Variety.
e. [X] Exhibit E, Statement of the Basis of Applicant's Ownership.

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act.)*
[ ] Yes *(If "Yes," answer items 16 and 17 below)* [X] No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
[ ] Yes [X] No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? N/A
[ ] Foundation [ ] Registered [ ] Certified

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
[ ] Yes *(If "Yes," give date)*
[X] No

19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES ?
[ ] Yes *(If "Yes," give names of countries and dates)*
[X] No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT
D. J. Thompson
DATE
7 MARCH 1989

SIGNATURE OF APPLICANT
DATE

FORM LS-470
(3-86)
Edition of 7-84 obsolete.

1

VARIETY: Yuba (formerly FM 48432)
EXHIBIT A: Origin and Breeding History of the Variety

Yuba was developed, using the pedigree method of breeding, from a Ferry-Morse cross made at San Juan Bautista, CA, in July of 1979 between Peto 81 used as the seed parent and E9208 used as the pollen parent. E9208 was later named Peelmech and was a Ferry-Morse deveopment.

F1 plants were medium-large determinate with medium sized square-round fruit exhibiting (while immature) a light green shoulder. F2 seeds from several F1 plants were harvested from field row #76004 in October 1980 at San Juan Bautista, CA.

F2 plants in 1981 had very good crops of firm medium sized fruit. Segregation occured for immature fruit color, occurrance of hollow locules, maturity, and for resistance to Fusarium Wilt race 2. Vine size, foliage type and fruit shape were quite uniform. F3 seeds were saved from three selected plants in field row #104 in April 1981 at our winter nursery near Los Mochis, Mexico. Seeds of the three plants were combined at harvest for ease of handling.

F3 generation progeny of the selected mass were noted at San Juan Bautista in October 1981. The row showed good earliness and yield. F4 seeds were harvested from two selected plants in field row #84118.

The F4 generation progenies of the two selected plants were screened for resistance to Fusarium Wilt race 2 and noted at SJB in October 1982. The second progeny row was homozygous resistant to F. race 2 and had the best qualities and yield with segregation only for light green shouldered fruit. Since the row was quite uniform otherwise, F5 seeds were massed from 30 plants in this field row # 91502 for more extensive trials.

The F5 generation plants also looked quite uniform and had excellent yield and quality fruit. F6 seeds were harvested from two selected plants with uniform green immature fruit in row #40040 in October 1983.

In 1984 the F6 generation plants and fruit quality were best in the first progeny row with all 35 plants showing the uniform green immature fruit. In October seeds were bulked from all 35 plants of field row #48432 at San Juan Bautista. The foliage was coarse and curly at harvest and the fruit were square round, and firm, and mature early.

Since this lot, #48432-Ms/84, also looked very good in 1985, it was placed in a variety/yield trial at San Juan Bautista in 1986 along with UC82B, VF6203 Peelmech, and Colusa (FM 48452 a line related to Yuba). Yuba (FM 48432) had yield similar to Colusa and exceeded the three check varieties. The fruit size and pH of Yuba were intermediate between UC82B and VF6203 and the soluble solids were equal to sightly higher for Yuba and Colusa. Both Yuba and Colusa had distinctly less hollow locular fruit than the three check varieties.

Trials throughout central California in 1986 through 1988 have shown that Yuba is a high quality, high yielding processing tomato similar to VF6203 but with resistance to Fusarium Wilt race 2.

Seed was harvested from 200 plants of Yuba in 1986 at San Juan Bautista for increase and cannery trials. A stock seed increased of 3000 plants was harvested in October of 1987 at San Juan Bautista. No obvious off type plants or fruit were observed in either increase and the variety appeared very uniform and stable. Subsequent trials of these seed lots were also uniform with no obvious segregation

VARIETY: YUBA (formerly FM 48432)
EXHIBIT B: Novelty Statement

Yuba is most similar to Colusa. Yuba can be distinguished from its Peelmech parent since Peelmech lacks resistance to Fusarium Wilt race 2. Yuba can be distinguished from its Peto 81 parent since Peto 81 has a light green shouldered immature fruit.

Yuba and Colusa were selected out of the same cross of Peto 81 with Peelmech. Yuba can be distinguished from Colusa since Colusa has light green shouldered immature fruit and Yuba has uniform green immature fruit.

	F. race 2 resistance	Lt. green shoulder imm. fruit
Peto 81	yes	yes
Peelmech	no	no
Colusa	yes	yes
Yuba	yes	no

FORM APPROVED: OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Tomato)

OBJECTIVE DESCRIPTION OF VARIETY

TOMATO *(Lycopersicon esculentum* Mill.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
FERRY MORSE SEED COMPANY	FM 48432	Yuba

ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)*

555 CODONI, P.O. BOX 4938 MODESTO, CA 95352-4938

FOR OFFICIAL USE ONLY

PVPO NUMBER 8900111

Choose responses for the following characters which best fit your variety. Complete this form as fully as possible for best characterization of the variety. When a single quantitative value is requested (e.g., fruit weight), your answer should be the mean of an adequate-sized, unbiased sample of plants. Use leading zeroes when necessary (e.g., [0][9] or [0][8][1], etc.). The applicant variety should be compared with at least one well-known standard check variety of the same type (see list of recommended check varieties below), and grown in the same trials. The characters on this form should be described from plants grown under normal conditions of culture for the variety. Indicate by a check whether trial data are from greenhouse ____ or field ____ plantings. Trials direct-seeded ____ or transplanted X ; staked ____ or unstaked ____. Give locations and dates of seeding and transplanting here:

San Juan Bautista, CA seeded 4/2/86 transplanted 5/31/86
San Juan Bautista, CA seeded 4/1/87 transplanted 5/5/87

COMPARISONS SHOULD BE MADE TO ONE OR MORE CHECK VARIETIES IN THE FOLLOWING LIST, IF AT ALL POSSIBLE. ENTER THE* NUMBER *OF THE CHECK IN BOXES WHERE IDENTITY OF CHECK IS REQUESTED.

1 = Ace 55 VF
2 = Campbell 37
3 = Chico III
4 = Flora Dade
5 = Florida MH-1
6 = Heinz 1350
7 = Homestead 24
8 = Marglobe
9 = Murietta
10 = New Yorker
11 = Ohio MR-13
12 = Red Cherry Large
13 = Red Rock
14 = Roma VF
15 = Rutgers
16 = Sunray
17 = Tropic
18 = UC 82
19 = VF 134
20 = US 28
21 = VF 145 B 7879
22 = Other *(Specify)* VF 6203

1. SEEDLING:

[2] Anthocyanin in hypocotyl of 2-15 cm. seedling: 1 = Absent 2 = Present

[1] Habit of 3-4 week old seedling: 1 = Normal 2 = Compact

2. MATURE PLANT (at maximum vegetative development):

[ ][ ][ ] Cm. Height

[2] Growth: 1 = Indeterminate 2 = Determinate

[2] Form: 1 = Lax, open 2 = Normal 3 = Compact 4 = Dwarf 5 = Brachytic

[2] Size of canopy (compared to others of similar type): 1 = Small 2 = Medium 3 = Large

[1] Habit: 1 = Sprawling (decumbent) 2 = Semi-erect 3 = Erect ('Dwarf Champion')

3. STEM:

[2] Branching: 1 = Sparse ('Brehm's Solid Red', 'Fireball') 2 = Intermediate ('Westover') 3 = Profuse ('UC 82')

[ ] Branching at cotyledonary or first leafy node: 1 = Present 2 = Absent

[3] No. of nodes below the first inflorescence: 1 = 1-4 2 = 4-7 3 = 7-10 4 = 10 or more

[2] No. of nodes between early (1st - 2nd, 2nd - 3rd) inflorescences. [ ] No. of nodes between later-developing inflorescences.

[3] Pubescence on younger stems: 1 = Smooth (no long hairs) 2 = Sparsely hairy (scattered long hairs) 3 = Moderately hairy 4 = Densely hairy or wooly

4. LEAF (mature leaf beneath the 3rd inflorescence):

[1] Type: 1 = Tomato 2 = Potato ('Trip-L-Crop') [2] Morphology *(choose illustration on pg. 5 of this form that is most similar)*

[3] Margins of major leaflets: 1 = Nearly entire 2 = Shallowly toothed or scalloped 3 = Deeply toothed or cut, esp. towards base

[3] Marginal rolling or wiltiness: 1 = Absent 2 = Slight 3 = Moderate 4 = Strong

[2] Onset of leaflet rolling: 1 = Early-season 2 = Mid-season 3 = Late season

4. LEAF (mature leaf beneath the 3rd inflorescence – continued):

[1] Surface of major leaflets: 1 = Smooth 2 = Rugose (bumpy or veiny)

[2] Pubescence: 1 = Smooth (no long hairs) 2 = Normal 3 = Hirsute 4 = Wooly

5. INFLORESCENCE (make observations on 3rd inflorescence):

[1] Type: 1 = Simple 2 = Forked (2 major axes) 3 = Compound (much branched)

[0][5] Number of flowers in inflorescence, average

[1] Leafy or "running" inflorescences: 1 = Absent 2 = Occasional 3 = Frequent

6. FLOWER:

[1] Calyx: 1 = Normal, lobes awl-shaped 2 = Macrocalyx, lobes large, leaflike 3 = Fleshy

[1] Calyx-lobes: 1 = Shorter than corolla 2 = Approx. equalling corolla 3 = Distinctly longer than corolla

[1] Corolla color: 1 = Yellow 2 = Old gold 3 = White or tan

[1] Style pubescence: 1 = Absent 2 = Sparse 3 = Dense

[1] Anthers: 1 = All fused into tube 2 = Separating into 2 or more groups at anthesis

[1] Fasciation (1st flower of 2nd or 3rd inflorescence): 1 = Absent 2 = Occasionally present 3 = Frequently present

7. FRUIT (3rd fruit of 2nd or 3rd cluster): *For the first 5 characters below, match your variety with the most similar illustration on pg. 5 of this form.*

[1][0] Typical fruit shape:

[3] Shape of transverse section:

[2] Shape of blossom end:

[1] Shape of stem end:

[1] Shape of pistil scar:

[1] Abscission layer: 1 = Present (pedicellate) 2 = Absent (jointless)

[1] Point of detachment of fruit at harvest: 1 = At pedicel joint 2 = At calyx attachment

[1][4] mm length of pedicel (from joint to calyx attachment)

[0][5][1]	mm length of mature fruit (stem axis)	[0][5][8]	mm length, check var. no.	[2][2]
[0][4][6]	mm diameter of fruit at widest point	[0][5][0]	mm diameter, check var. no.	[2][2]
[0][6][2]	g weight of mature fruit	[0][7][9]	g weight, check var. no.	[2][2]

[2] No. of locules: 1 = Two 2 = Three and four 3 = Five or more

[1] Fruit surface: 1 = Smooth 2 = Slightly rough 3 = Moderately rough or ribbed

[1] Fruit base color (mature-green stage): 1 = Light green ('Lanai', 'VF145-F5') 2 = Light gray-green ('Westover') 3 = Apple or medium green ('Heinz 1439 VF') 4 = Yellow green 5 = Dark green

[1] Fruit pattern (mature-green stage): 1 = Uniform green 2 = Green-shouldered 3 = Radial stripes on sides of fruit

[ ] Shoulder color if different from base: 1 = Dark green 2 = Grey green 3 = Yellow green

[5] Fruit color, full-ripe: 1 = White 2 = Yellow 3 = Orange 4 = Pink 5 = Red 6 = Brownish 7 = Greenish 8 = Other *(Specify)* _____

[3] Flesh color, full-ripe: 1 = Yellow 2 = Pink 3 = Red/Crimson 4 = Orange 5 = Other *(Specify)* _____

[1] Flesh color: 1 = Uniform 2 = With lighter and darker areas in walls

[2] Locular gel color of table-ripe fruit: 1 = Green 2 = Yellow 3 = Red

[2] Ripening: 1 = Blossom-to-stem end 2 = Uniform

7. FRUIT (3rd fruit of 2nd or 3rd cluster): Continued

[2] Ripening: 1 = Inside out 2 = Uniformly 3 = Outside in

[2] Epidermis color: 1 = Colorless 2 = Yellow

[1] Epidermis: 1 = Normal 2 = Easy-peel

[3] Epidermis texture: 1 = Tender 2 = Average 3 = Tough

[3] Thickness of pericarp . . . . . [3]

1 = Under 3 mm 2 = 3-6 mm 3 = 6-9 mm 4 = Over 9 mm

[1] Stem scar size: 1 = Small ('Roma') 2 = Medium ('Rutgers') 3 = Large

[1] Core: 1 = Coreless (absent or smaller than 6x6 mm) 2 = Present

Thickness of pericarp, check var. no. [2][2]

8. RESISTANCE TO FRUIT DISORDERS (Use code: 0 = Unknown, 1 = Susceptible, 2 = Resistant)

[0] Blossom end rot
[2] Blotchy ripening
[0] Bursting
[2] Catface
[2] Cracking, concentric
[2] Cracking, radial
[2] Fruit pox
[2] Gold fleck
[2] Graywall
[2] Zippering
[ ] Other *(Specify)* _____

9. DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant). NOTE: If claim of novelty is based wholly or in substantial part upon disease resistance, trial data should be appended. These should specify the method of testing, the reaction of the application variety, and reaction of well-known check varieties grown in the trial (identified by name).

VIRAL DISEASES:

[0] Cucumber mosaic
[0] Curly top
[0] Potato-Y virus
[ ] Other virus *(Specify)* _____
[0] Tobacco mosaic, Race 0
[0] Tobacco mosaic, Race 1
[0] Tobacco mosaic, Race 2
[0] Tobacco mosaic, Race 2[2]
[0] Tomato spotted wilt
[0] Tomato yellows

BACTERIAL DISEASES:

[0] Bacterial canker *(Corynebacterium michiganense)*
[0] Bacterial soft rot *(Erwinia carotovora)*
[0] Bacterial speck *(Pseudomonas tomato)*
[0] Bacterial spot *(Xanthomonas vesicatorium)*
[0] Bacterial wilt, *(Pseudomonas solanacearum)*
[ ] Other bacterial disease *(Specify)* _____

FUNGAL DISEASES:

[0] Anthracnose *(Colletotrichum* spp.*)*
[1] Brown root rot or corky root, *(Pyrenochaeta lycopersici)*
[0] Collar rot or stem canker, *(Alternaria solani)*
[0] Early blight defoliation, *(Alternaria solani)*
[2] Fusarium wilt, Race 1, *(F. oxysporum f. lycopersici)*
[2] Fusarium wilt, Race 2
[0] Fusarium wilt, Race 3
[1] Gray leaf spot *(Stemphylium* spp.*)*
[0] Late blight, Race 0, *(Phytophthora infestans)*
[0] Late blight, Race 1
[0] Leaf mold, Race 1 *(Cladosporium fulvum)*
[0] Leaf mold, Race 2
[0] Leaf mold, Race 3
[ ] Leaf mold, other races *(Specify)* _____
[0] Nailhead spot *(Alternaria tomato)*
[1] Septoria leafspot *(S. lycopersici)*
[0] Target leafspot *(Corynespora casiicola)*
[2] Verticillium wilt, Race 1 *(V. albo-atrum)*
[0] Verticillium wilt, Race 2
[ ] Other fungal disease _____
[ ] Other fungal disease _____

9. DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant – Continued)

INSECTS AND PESTS:

[0]	Colorado potato beetle *(Leptinotarsa decemlineata)*	[0]	Tomato hornworm *(Manduca quinquemaculata)*
[1]	Southern root knot nematode *(Meloidogyne incognita)*	[0]	Tomato fruitworm *(Heliothis zea)*
[0]	Spider mites *(Tetranychus spp.)*	[0]	Whitefly *(Trialeurodes vaporariorum)*
[0]	Sugar beet army worm *(Spodoptera exigua)*	[ ]	Other *(Specify)* _____
[0]	Tobacco flea beetle *(Epitrix hirtipennis)*		_____

POLLUTANTS:

[0]	Ozone	[0] Sulfur dioxide	[ ] Other *(Specify)* _____

10. CHEMISTRY AND COMPOSITION OF FULL-RIPE FRUITS: Suggested test methods may be found in "Tomato Products," 5th ed., National Canners Assn. Bull. 27-L. Please specify test methods or give a reference to methods used. Fill in table below with values for the new variety and for at least one well-known check variety of similar type grown in the same trial. Specify names or numbers of check varieties.

	SUBMITTED VARIETY	Check Variety UC 82B	Check Variety VF 6203	Check Variety Colusa
pH San Juan Bautista Ca 86/87	4.41/4.39	4.36/4.37	4.46/4.41	4.34/4.37
Titratable acidity, as % citric				
Total solids (dry matter, seeds and skin removed)				
Soluble solids, as °Brix SJB 86/87	4.6/4.8	4.2/4.0	4.6/4.8	4.8/4.8

11. PHENOLOGY: Express length of developmental stages either as calendar days or as heat units (growing degree days), in degrees Celsius. If heat units are used, indicate the base temperature used in their calculation here _____ °C. See paper by Warnock under "References" for method. Give comparative data for at least one check variety; identify checks by name or by number from table on page 1.

	APPLICATION VARIETY	Check variety UC 82B	Check variety VF 6203	Check variety Colusa
Seeding to 50% flower (1 open flower on 50% of plants) SJB 86/87	56/52 days	55/51 days	59/51 days	59/59 days
Seed to once-over harvest *(if applicable)*				

[3] Fruiting season: 1 = Long ('Marglobe') 2 = Medium ('Westover') 3 = Short, concentrated ('VF 145') 4 = Very concentrated ('UC 82')

[2] Relative maturity in areas tested: 1 = Early 2 = Medium early 3 = Medium 4 = Medium late 5 = Late 6 = Variable (if relative maturity is known to differ by location or environment, please explain on separate sheet).

12. ADAPTATION: If more than one category applies, list all in rank order.

[0][1] Culture: 1 = Field 2 = Greenhouse

[0][0][3][4] Principal use(s): 1 = Home garden 2 = Fresh market 3 = Whole-pack canning 4 = Concentrated products 5 = Other *(Specify)* _____

[2] Machine harvest: 1 = Not adapted 2 = Adapted

[0][9][1][1] Regions to which adaptation has been demonstrated:
1 = Northeast 2 = Mid Atlantic 3 = Southeast 4 = Florida 5 = Great Plains 6 = South-central 7 = Intermountain West 8 = Northwest 9 = California: Sacramento and Upper San Joaquin Valley 10 = California: Coastal areas 11 = California: Southern San Joaquin Valley & deserts

VARIETY: YUBA (formerly FM 48432)
EXHIBIT D: Additional Description of the Variety

Yuba is a medium early, machine harvestable processing tomato with resistance to Verticillium Wilt, and Fusarium Wilt races 1 and 2. It has coarse, curly foliage and the fruit is uniform green while immature. The mature fruit is square-round, of medium small size with medium high soluble solids and medium pH.

Yuba exhibits much less puffy (hollow) fruit problem than VF 6203 or Peelmech. The pH and soluble solids of Yuba are equal to of better than VF 6203 or Peelmech. The fruit is smaller than VF 6203 but slightly larger than UC 82B. The vine size and foliage type of Yuba are very similar to Peelmech and so is the once over harvest maturity in Woodland, California. The percentage of yellow eye on fruit in potassium deficient fields is very low compared to UC 82 and Colusa but similar to Peelmech.

8900111

EXHIBIT "E"
Plant Variety Protection Application
No:.....

ASSIGNMENT

I, .Court Nichols....., agree and hereby do transfer and assign to FERRY-MORSE SEED COMPANY all my rights, title, and interest in and to that certain variety namely, ...Yuba (formerly FM 48432)...., for which application for Plant Variety Protection Certificate has been filed. This agreement shall be binding on my administrators, successors, and assigns.

In Witness Whereof, I have executed this agreement this day.2nd.... of .March....., 19 .89.....

BREEDER

.....Courtland L. Nichols.....

EXHIBIT "E"

Plant Variety Protection Application

No: 8900111

STATEMENT OF OWNERSHIP

I, George R. Allbritten, Secretary of Ferry-Morse Seed Company do hereby certify that Ferry-Morse Seed Company is the breeder and owner of that certain variety namely, Tomato, Yuba

for which an application for Plant Variety Protection has been filed.

In witness whereof I have executed this statement of ownership and caused the Ferry-Morse Corporate Seal to be affixed this 27 day of April, 1990.

Secretary

SEAL